

Abstract

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Conduit component for a power supply network, use thereof, method for transporting cryogenic energy carriers in conduits and devices suitable therefor

What is described is a conduit component for a power supply network, comprising at least one first conduit for an at least partially liquid cryogenic energy carrier and at least one second conduit for a heat transfer medium liquid at the temperature of the liquid cryogenic energy carrier, said second conduit running parallel to the first conduit, and also heat exchangers, which are provided at the end of the second conduit and are in thermal contact with the first conduit, for evaporating or condensing the heat transfer medium during the extraction of the cryogenic medium from or during its introduction into the first conduit.

The conduit components can be used for setting up multifunctional power supply networks which allow the low-loss conduction of liquid cryogenic heat transfer media.